

Pennsylvania, and West Virginia; on 10 to 14 in Indian Territory, Massachusetts, New Jersey, New York, South Carolina, and Wisconsin; and on 5 to 9 in Connecticut, District of Columbia, Maine, Minnesota, North Dakota, and Vermont. The only states in which thunderstorms were reported on less than 5 dates were Montana, New Hampshire, and Rhode Island, where they were reported on 2 dates.

West of the Rocky Mountains thunderstorms were reported in Arizona on the 3d, 21st, 23d to 28th, and 30th; in California on the 1st, 2d, 3d, 6th, 12th, and 21st to 25th; in Colorado on the 2d, 4th, 6th, 7th, 8th, 10th to 14th, 16th, and 23d to 30th; in Idaho on the 23d; in Nevada on the 3d, 4th, 9th, 10th, 11th, 13th, 15th, 16th, and 21st to 29th; in New Mexico on the 3d, 4th, 17th, 18th, 19th, and 23d to 31st; in Oregon on the 2d, 6th, 7th, 8th, 10th, 15th, 23d, 24th, 25th, and 29th; in Utah on the 10th, 11th, 16th, 22d to 27th, 29th, and 30th; in Washington on the 6th; and in Wyoming on the 1st, 8th, 10th, 12th, 23d, 24th, 27th, and 29th.

AURORAS.

The most important auroral displays of the month were noted from New England to Montana and southward to Missouri and Oklahoma Territory the night of 18-19th. In New England the display was very brilliant, and at its height covered nearly the entire sky, with a well-defined corona near the zenith.

Auroral displays of May, 1892.

| Date. | Station. | Extent of display. | | Remarks. |
|-------|----------------------------|---------------------------------|-----------|---|
| | | Azimuth. | Altitude. | |
| 1 | New Whatcom, Wash... | ° | ° | Arch, with luminous beams. |
| 2 | Tatoosh Island, Wash.. | In the n. | | Seven streamers of a pale yellow color. |
| 7 | Alpena, Mich..... | | 30 | Arch, and beams of white light. |
| 7 | Marquette, Mich..... | 135 to 195 | 25 | Arch, with irregular rays of light. |
| 8 | Milwaukee, Wis..... | In the n. | 15 | A light arch. |
| 16 | Sault de Ste. Marie, Mich. | 135 to 225 | 25 | Electric blue color, with beams of light. |
| 18 | Manchester, N. H..... | 105 to 245 | 60 | Bright yellow light, with streamers to zenith. |
| 18 | Burlington, Vt..... | | Zenith | Streamers. |
| 18-19 | Boston, Mass..... | 110 to 280 | 90 | Corona formed 5° south of zenith. |
| 18-19 | Woods Holl, Mass..... | 100 to 260 | 20 | Waves of light to altitude 85°. |
| 18 | Cambridge, Mass..... | Covered larger part of the sky. | | Waves of pale green light met 5° south of the zenith, from which point streamers radiated in all directions, those south of zenith stopping in altitude about 75°. Center unsteady, changing position rapidly. Display observed from 8.45 p. m. At 10.15 p. m. arch of 20° altitude in the north, with shifting lights. |
| 18 | New Haven, Conn..... | 90 to 270 | Zenith | Streamers and "merry dancers" of white and pale yellow. |
| 18 | New London, Conn..... | 135 to 225 | 70 | Pale yellow light, with streamers. |
| 18-19 | Buffalo, N. Y..... | 110 to 205 | 40 | Waves of light and "merry dancers." |
| 18-19 | Oswego, N. Y..... | | * | Double arch 1 a. m. 19th. |
| 18 | Columbia, Mo..... | In the n. | 45 | Arch, with streamers. |
| 18-19 | Bismarck, N. Dak..... | 190 to 270 | Zenith | Irregular beams of light. |
| 18 | Greenfield, Iowa..... | In nne. | | Streamers. |
| 18 | Yankton, S. Dak..... | 140 to 220 | 40 | Arch, with faint rose-colored beams. |
| 18 | Helena, Mont..... | In the n. | Zenith | Light resembled the dawn of day. |
| 18 | Gate City, Okla..... | 175 to 195 | 40 | Numerous streamers of white light. |
| 19 | Rapid City, S. Dak..... | 90 to 270 | † | An arch of white light. |
| 22 | Marquette, Mich..... | 135 to 270 | 15 | Diffused light. |

* 10° to 20° south of zenith.

† Beyond zenith.

MISCELLANEOUS PHENOMENA.

DROUGHT.

A report from Saint Thomas, W. I., dated the 14th, stated that the long drought was broken, and that unusually heavy rain had fallen at that place and over the Windward Islands. In Florida the drought continued until the 28th, when thunderstorms, with heavy precipitation, occurred generally over the state. The remainder of the month there was a fair distribution of showers, except in localities in the western part of the

state. The abundant rainfall was attended by a marked improvement in the condition of crops. Reports for the early part of the month from Charleston, S. C., and Augusta, Ga., indicate that rain was badly needed in those sections. The drought in southeastern Texas was broken on the 16th. A report from Fort Stanton, N. Mex., dated the 25th, stated that the protracted drought was injuring crops in the mountain districts.

STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for May, 1892, of the directors of the various state weather services:

ALABAMA.

Temperature.—The mean was 2.1 below the normal; maximum, 100, at Geneva, 25th; minimum, 36, at Healing Springs, 22d; greatest monthly range, 57, at Healing Springs; least monthly range, 34, at Chepultepec and Jemison.

Precipitation.—The average was 0.57 below the normal; greatest monthly, 8.94 at Pushmataha; least monthly, 0.86, at Newton.

Wind.—Prevailing direction, south.—*P. H. Mell, Observer, Weather Bureau, Auburn, director.*

ARIZONA.

Temperature.—The mean was about 4.0 below the normal; maximum, 115, at Fort Mohave, 19th; minimum, 13, at Whipple Barracks, 6th; greatest monthly range, 76, at Whipple Barracks; least monthly range, 32, at Dos Cabezos.

Precipitation.—The average was about 0.05 below the normal; greatest monthly, 7.55, at Flagstaff; least monthly, 0.00, at Bisbee, Chiricahua Mountains, Fort Bowie, Navajo Springs, Teviston, and Walnut Ranch.

Wind.—Prevailing direction, southwest.—*J. C. Hayden, Observer, Weather Bureau, Tucson, director.*

ARKANSAS.

The month was remarkable for the great amount of rainfall.

Temperature.—The mean was 1.3 below the normal; maximum, 95, at Keesses Ferry, 4th; minimum, 36, at El Dorado, 22d; greatest monthly range, 53, at Hope; least monthly range, 28, at Madding.

Precipitation.—The average was 5.55 above the normal; greatest monthly, 15.80, at Dallas; least monthly, 2.93, at Greenville, Miss.

Wind.—Prevailing direction, south.—*M. F. Locke, Commissioner of Agriculture, Little Rock, director; F. H. Clarke, Observer, Weather Bureau, assistant.*

CALIFORNIA.

Temperature.—The mean was 2.6 below the normal; maximum, 107, at Bakersfield, 21st; minimum, 29, at Fort Jones, 8th; greatest monthly range, 69, at San Ardo; least monthly range, 47, at Oakland and Yuba City.

Precipitation.—The average was 1.67 above the normal; greatest monthly, 7.58, at Georgetown; least monthly, 0.28, at Bakersfield.

Wind.—Prevailing direction, west.—*J. A. Barwick, Observer, Weather Bureau, Sacramento, director.*

COLORADO.

The continued cold weather was unfavorable to crops.

Temperature.—The mean was 4.0 below the normal; maximum, 96, at Crook, 22d; minimum, 11, at Breckenridge, 6th; greatest monthly range, 66, at Crook and Downing; least monthly range, 45, at Moraine.

Precipitation.—The average was normal; greatest monthly, 9.73, at Chivington; least monthly, 0.08, at San Acacia.

Wind.—Prevailing direction, west.—*W. S. Miller, Observer, Weather Bureau, Denver, director.*

FLORIDA.

Temperature.—Maximum, 98, at Bristol, 28th; minimum, 48, at Archer, 23d and 24th; greatest monthly range, 49, at Archer; least monthly range, 18, at Key West.

Precipitation.—Greatest monthly, 4.62, at Ocala; least monthly, 0.19, at Pensacola.

Wind.—Prevailing direction, southeast.—*E. R. Demain, Observer, Weather Bureau, Jacksonville, director.*

GEORGIA.

Temperature.—The mean was 0.7 below the normal; maximum, 100, at Cordele, 30th and 31st; minimum, 36, at Diamond, 24th; greatest monthly range, 58, at Cordele; least monthly range, 35, at Lumpkin.

Precipitation.—The average was 1.25 below the normal; greatest monthly, 4.91, at Hephzibah; least monthly, 0.43, at Fleming.

Wind.—Prevailing directions, west and southwest.—*Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.*

ILLINOIS.

Temperature.—The mean was 3.5 below the normal of the last 17 years; maximum, 90, at McLeansborough, 30th; minimum, 30, at East Peoria, 23d.

Precipitation.—The average was 3.97 above the normal; greatest monthly, 13.25, at Ottawa; least monthly, 5.20, at Olney.

Wind.—Prevailing direction, southeast.—*John Craig, Observer, Weather Bureau, Springfield, director.*

INDIANA.

Temperature.—The mean was 1.1 below the normal; maximum, 89, at Vevay, 31st; minimum, 30, at Hammond, 13th; greatest monthly range, 51, at Mount Vernon and Mauzy.

Precipitation.—The average was 3.55 above the normal; greatest monthly, 13.11, at Hawpatch; least monthly, 4.29, at Jeffersonville.

Wind.—Prevailing direction, southwest.—*Prof. H. A. Huston, La Fayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.*

IOWA WEATHER AND CROP SERVICE.

Temperature.—The mean was about 5.0 below the normal; maximum, 88, at Glenwood, 24th; minimum, 29, at College Springs, 10th; greatest monthly range, 54, at Centerville; least monthly range, 34, at Vinton.

Precipitation.—The average was 4.50 above the normal; greatest monthly, 12.64, at Seymour; least monthly, 4.87, at Osage.

Wind.—Prevailing direction, northwest.—*J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.*

KANSAS.

Temperature.—The mean was 5.5 below the normal; maximum, 98, at Sharon Springs, 28th; minimum, 27, at Lakin, 6th and 10th; greatest monthly range, 68, at Sharon Springs; least monthly range, 41, at Lawrence.

Precipitation.—The average was 3.77 above the normal; greatest monthly, 14.10, at Topeka; least monthly, 2.30, at Morton.

Wind.—Prevailing direction, northwest.—*Prof. J. T. Lovewell, Topeka, director; T. B. Jennings, Observer, Weather Bureau, assistant.*

KENTUCKY.

Temperature.—The mean was about 2.0 below the normal; maximum, 90, at Bowling Green and Shelbyville, 31st, and at Louisa, 5th; minimum, 36, at Central City, 23d; greatest monthly range, 52, at Central City; least monthly range, 34, at Wickliffe.

Precipitation.—The average was about 2.00 above the normal; greatest monthly, 8.95, at Shelbyville; least monthly, 3.59, at Richmond.

Wind.—Prevailing direction, southwest.—*Frank Burke, Observer, Weather Bureau, Louisville, director.*

LOUISIANA.

Temperature.—The mean was 0.9 below the normal; maximum, 96, at Coushatta, 30th, and at Schriever, 15th, 30th, and 31st; minimum, 36, at Winnborough, 23d; greatest monthly range, 58, at Winnborough; least monthly range, 18, at Port Eads.

Precipitation.—The average was 2.45 below the normal; greatest monthly, 7.18, at Homer; least monthly, 0.66, at Girard.

Wind.—Prevailing direction, southeast.—*George E. Hunt, Local Forecast Official, Weather Bureau, New Orleans, director.*

MARYLAND.

Temperature.—Maximum, 90, at Seaford, Del., 4th; minimum, 35, at Boettcherville, 9th; greatest monthly range, 51, at Boettcherville; least monthly range, 28, at Jewell.

Precipitation.—Greatest monthly, 6.35, at Boettcherville; least monthly, 0.16, at Frederick.

Wind.—Prevailing direction, southwest.—*Dr. William B. Clark, Johns Hopkins University, Baltimore, director; Prof. Milton Whitney, Maryland Agricultural College, secretary and treasurer; C. P. Cronk, Observer, Weather Bureau, in charge.*

MICHIGAN.

Temperature.—The mean was 0.3 below the normal; maximum, 86, at Birch Run and Adrian, 31st; minimum, 23, at Weldon Creek, 2d; greatest monthly range, 56, at Weldon Creek and Fitchburgh; least monthly range, 27, at McMillan.

Precipitation.—The average was 2.28 above the normal; greatest monthly, 10.01, at Vandalia; least monthly, 1.00, at McMillan.

Wind.—Prevailing direction, southwest.—*E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.*

MINNESOTA.

Temperature.—Maximum, 79, at Saint Vincent, 16th; minimum, 22, at Eagle Bend, 8th; greatest monthly range, 54, at Saint Vincent; least monthly range, 34, at Sheldon.

Precipitation.—Greatest monthly, 9.91, at Northfield; least monthly, 2.22, at Saint Vincent.

Wind.—Prevailing direction, northwest.—*J. H. Harmon, Observer, Weather Bureau, Minneapolis, director.*

MISSISSIPPI.

Temperature.—The mean was 0.5 below the normal; maximum, 98, at Columbus, 16th; minimum, 40, at Aberdeen, 21st and 24th, at Brookhaven, 21st, and at Columbus, Louisville, and Okolona, 22d; greatest monthly range, 58, at Columbus; least monthly range, 35, at Ship Island.

Precipitation.—The average was 0.93 below the normal; greatest monthly, 8.42, at Meridian; least monthly, 0.49, at Vicksburg.

Wind.—Prevailing direction, south.—*R. B. Fulton, Observer, Weather Bureau, University, director.*

MISSOURI.

The continued cool and wet weather was generally unfavorable to agricultural interests.

Temperature.—The mean was 3.6 below the normal; maximum, 91, at Mexico, 24th; minimum, 28, at Adrian, 20th and 21st.

Precipitation.—The average was 4.88 above the normal; greatest monthly, 18.48, at South McAlester, Ind. T.; least monthly, 5.10, at Oak Ridge.

Wind.—Prevailing direction, southwest.—*Levi Chubbuck, Secretary of State Board of Agriculture, Columbia, director; H. A. McNally, Observer, Weather Bureau, assistant.*

MONTANA.

The month was the coldest on record, and vegetation and crops were retarded.

Temperature.—Maximum, 101, at Glendive, 2d; minimum, 13, at Fort Logan, 3d; greatest monthly range, 77, at Glendive; least monthly range, 48, at Virginia City.

Precipitation.—Greatest monthly, 2.69, at Dearborn Canyon; least monthly, 0.29, at Great Falls.

Wind.—Prevailing direction, east.—*E. J. Glass, Observer, Weather Bureau, Helena, director.*

NEBRASKA.

Temperature.—Maximum, 98, at Ansley, 22d, and at Mullan, 23d; minimum, 27, at Fort Robinson, 8th, and at Whitman, 20th; greatest monthly range, 69, at Ansley; least monthly range, 38, at West Mill and Hays Centre.

Precipitation.—Greatest monthly, 12.13, at Crete; least monthly, 2.82, at Kimball.

Wind.—Prevailing direction, northwest.—*Prof. Goodwin D. Swezey, Crete, director; G. A. Loveland, Observer, Weather Bureau, assistant.*

NEVADA.

Temperature.—The mean was 0.8 below the normal; maximum, 100, at Belleville, 18th; minimum, 13, at Ely, 14th; greatest monthly range, 71, at Tuscarora; least monthly range, 44, at Palmetto.

Precipitation.—The average was 0.04 below the normal; greatest monthly, 4.04, at Stofiel; least monthly, 0.00, at Elko.

Wind.—Prevailing direction, west.—*Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.*

NEW ENGLAND.

Temperature.—The mean was 1.4 below the normal; maximum, 89, at Mansfield, Mass., 31st; minimum, 17, at Farmington, 5th; greatest monthly range, 65, at Stratford; least monthly range, 26, at Nantucket.

Precipitation.—The average was 1.75 above the normal; greatest monthly, 7.35, at Chicopee; least monthly, 2.02, at Calais.

Wind.—Prevailing direction, southwest.—*J. Warren Smith, Observer, Weather Bureau, Boston, Mass., director.*

NEW MEXICO.

Temperature.—Maximum, 96, at Socorro, 19th; minimum, 15, at Halls Peak, 6th; greatest monthly range, 72, at Coolidge; least monthly range, 39, at La Luz.

Precipitation.—Greatest monthly, 1.35, at Albert; least monthly, 0.00, at a number of stations in the south-central part.

Wind.—Prevailing direction, west.—*H. B. Hersey, Observer, Weather Bureau, Santa Fe, director.*

NEW YORK.

Temperature.—The mean was 1.9 below the normal; maximum, 91, at Lockport and Rochester, 31st; minimum, 26, at Humphrey, 8th; greatest monthly range, 63, at Humphrey; least monthly range, 36, at Setauket.

Precipitation.—The average was 2.01 above the normal; greatest monthly, 11.02, at Bolivar; least monthly, 3.16, at Watkins.

Wind.—Prevailing direction, southwest.—*Prof. E. A. Fuertes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Observer, Weather Bureau, assistant.*

NORTH CAROLINA.

Temperature.—The mean was 0.5 below the normal; maximum, 97, at Douglas, 6th; minimum, 32, at Bakersville, 24th; greatest monthly range, 63, at Douglas; least monthly range, 28, at Hatteras.

Precipitation.—The average was 0.58 below the normal; greatest monthly, 6.80, at Linville; least monthly, 1.64, at Wilmington.

Wind.—Prevailing direction, southwest.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.*

NORTH DAKOTA.

Temperature.—The mean was 7.1 below the normal; maximum, 95, at Medora, 22d; minimum, 13, at White Earth, 2d; greatest monthly range, 75, at Medora and White Earth; least monthly range, 48, at Saint John and Moorhead, Minn.

Precipitation.—The average was 0.40 below the normal; greatest monthly, 5.86, at Wahpeton; least monthly, 0.35, at Bottineau.

Wind.—Prevailing direction, northwest.—*W. H. Fallon, Observer, Weather Bureau, Bismarck, director.*

OHIO.

Temperature.—The mean was 1.0 below the normal; maximum, 99, at Portsmouth, 31st; minimum, 28, at Carrollton, Lordstown, and Weymouth, 8th; greatest monthly range, 62, at Weymouth; least monthly range, 37, at Elyria.

Precipitation.—The average was 2.09 above the normal; greatest monthly, 11.40, at Wauseon; least monthly, 3.15, at Pomeroy.

Wind.—Prevailing direction, southwest.—*Prof. B. F. Thomas, Columbus, director; C. M. Strong, Observer, Weather Bureau, secretary and assistant.*

OKLAHOMA.

Temperature.—Maximum, 98, at Mangum, 1st; minimum, 32, at Keokuk Falls, 23d; greatest monthly range, 59, at Fort Sill and Keokuk Falls; least monthly range, 38, at Healdton.

Precipitation.—Greatest monthly, 18.40, at Healdton; least monthly, 4.48, at Fort Supply.

Wind.—Prevailing direction, south.—*Louis Dorman, Observer, Weather Bureau, Oklahoma City, director.*

OREGON.

Temperature.—The mean was 0.8 below the normal; maximum, 96, at Grants Pass, 20th; minimum, 18, at Silver Lake, 1st; greatest monthly range, 72, at Crook; least monthly range, 29, at Bandon.

Precipitation.—The average was 0.26 above the normal; greatest monthly, 7.64, at Langlois; least monthly, 0.67, at The Dalles.

Wind.—Prevailing directions, west and southwest.—*Hon. H. E. Hayes, Master State Grange, Portland, director; B. S. Pague, Observer, Weather Bureau, assistant.*

PENNSYLVANIA.

Temperature.—The mean was 1.5 below the normal; maximum, 91, at Johnstown, 31st; minimum, 28, at Wellsborough, 10th; greatest monthly range, 61, at Smethport; least monthly range, 40, at Philadelphia.

Precipitation.—The average was 2.25 above the normal; greatest monthly, 9.39, at Kane; least monthly, 3.95, at Harrisburg.

Wind.—Prevailing direction, west.—*Under direction of the Franklin Institute, Philadelphia; H. L. Ball, Observer, Weather Bureau, assistant.*

SOUTH CAROLINA.

Temperature.—Maximum, 94, at Cheraw, Florence, and Kingstree, 6th; minimum, 39, at Greenville, 24th.

Precipitation.—Greatest monthly, 8.67, at Trial; least monthly, 2.07, at Green Pond.—*A. P. Butler, Observer, Weather Bureau, Columbia, director.*

SOUTH DAKOTA.

Temperature.—The mean was 7.6 below the normal; maximum, 92, at Midland, 24th; minimum, 15, at Macy, 6th and 6th; greatest monthly range, 66, at Oelrichs; least monthly range, 41, at Rapid City.

Precipitation.—The average was 1.53 above the normal; greatest monthly, 8.84, at Watertown; least monthly, 2.58, at Whitewood.

Wind.—Prevailing direction, northwest.—*S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.*

TENNESSEE.

Temperature.—The mean was 0.9 above the normal; maximum, 92, at Springdale, 17th; minimum, 37, at Hohenwald, 23d; greatest monthly range, 53, at Hohenwald; least monthly range, 35, at McMinnville.

Precipitation.—The average was 1.10 above the normal; greatest monthly, 8.64, at Lynnville; least monthly, 2.81, at Knoxville.

Wind.—Prevailing direction, south.—*J. B. Marbury, Observer, Weather Bureau, Nashville, director.*

TEXAS.

Temperature.—The mean was 0.4 below the normal; maximum, 109, at Fort Ringgold, 29th and 30th; minimum, 32, at Fort Hancock; greatest range, 66, at Fort Hancock; least monthly range, 28, at Corpus Christi.

Precipitation.—The average was 1.75 below the normal; greatest monthly, 14.32, at Gainesville; least monthly, 0.00, at Camp Pena Colorado and Fort Hancock.

Wind.—Prevailing direction, southeast.—*D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.*

UTAH.

The cold weather retarded crops.

Temperature.—Maximum, 98, at Saint George, 19th and 23d; minimum, 19, at Soldiers Summit, 8th; greatest monthly range, 73, at Manti; least monthly range, 45, at Lake Park and Soldiers Summit.

Precipitation.—Greatest monthly, 3.00, at Logan; least monthly, 0.20, at Saint George.—*J. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.*

VIRGINIA.

Temperature.—Maximum, 95, at Richmond, 4th; minimum, 33, at Dale Enterprise, 9th; greatest monthly range, 56, at Dale Enterprise; least monthly range, 40, at Birdsnest.

Precipitation.—Greatest monthly, 5.10, at Big Stone Gap; least monthly, 1.62, at Charlottesville.

Wind.—Prevailing direction, southwest.—*Dr. E. A. Craighill, Lynchburg, director; J. N. Ryker, Observer, Weather Bureau, assistant.*

WASHINGTON.

Temperature.—The mean was 1.2 below the normal; maximum, 96, at Chehalis, 20th; minimum, 27, at Waterville, 6th; greatest monthly range, 64, at Chehalis; least monthly range, 27, at Tatoosh Island.

Precipitation.—The average was 0.48 above the normal; greatest monthly, 7.64, at Neah Bay; least monthly, 0.24, at Vashon.

Wind.—Prevailing direction, west.—*E. B. Olney, Observer, Weather Bureau, Olympia, director.*

WEST VIRGINIA.

Temperature.—Maximum, 96, at Spencer, 31st; minimum, 32, at Ella, 8th; greatest monthly range, 59, at Ritchie C. H.; least monthly range, 42, at Pleasant Hill.

Precipitation.—Greatest monthly, 7.07, at Elkhorn; least monthly, 2.42, at Martinsburgh.

Wind.—Prevailing direction, west.—*W. W. Dent, Observer, Weather Bureau, Parkersburgh, director.*

WISCONSIN.

Temperature.—Maximum, 86, at Koepenick, 30th; minimum, 22, at Columbus, 8th, and at Phillips, 12th.

Precipitation.—Greatest monthly, 11.75, at Mineral Point; least monthly, 2.15, at Butternut.

Wind.—Prevailing direction, northeast.—*W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.*

WYOMING.

Temperature.—Maximum, 92, at Casper, 26th; minimum, 11, at Lander, 5th; greatest monthly range, 70, at La Barge and Lander; least monthly range, 44, at Bitter Creek.

Precipitation.—Greatest monthly, 4.90, at Wheatland; least monthly, 0.60, at La Barge.

Wind.—Prevailing direction, west.—*E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.*